

CLAIMS

1. A vehicle floor comprising:

a unitary, one-piece panel formed with an integral channel for routing a vehicle distribution system conduit at least partially within said channel, wherein the vehicle distribution system is selected from the group consisting of electrical, hydraulic and ventilation.

2. The vehicle floor of claim 1, wherein the panel includes an inner panel portion and an outer panel portion, and wherein the panel is sufficiently bendable between the inner panel portion and the outer panel portion to at least partially enclose and further define said channel therebetween.

3. The vehicle floor of claim 2, wherein at least one of the inner panel portion and the outer panel portion includes an integral corrugated portion and wherein the corrugated portion at least partially defines the channel.

4. The vehicle floor of claim 2 wherein at least one of the inner panel portion and the outer panel portion is formed with an integral flange, wherein said flange is matable with an adjoining surface on the vehicle to at least partially join the panel to the adjoining surface.

5. The vehicle floor of claim 2, wherein at least one of the inner panel portion and the outer panel portion at least partially defines an opening for said routing of said vehicle distribution system conduit within said channel.

6. The vehicle floor of claim 2, wherein the inner panel portion is formed to at least partially define an integral cross member.

7. The vehicle floor of claim 2, wherein the inner panel portion includes a substantially flat portion.

8. The vehicle floor of claim 1, wherein the panel is formed to at least partially define integral, opposing rocker panel portions.

9. The vehicle floor of claim 1, wherein the panel is formed to at least partially define an integral transmission tunnel.

10. The vehicle floor of claim 1, wherein the panel is formed to at least partially define a front floor pan portion, a rear floor pan portion and a trunk portion.

11. The vehicle door of claim 1, wherein the panel is formed by a method selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming.

12. The vehicle floor of claim 1, wherein the panel is comprised of a plastic material.

13. A method of manufacturing a vehicle floor, the method comprising:

5 forming a unitary, one-piece panel with an integral channel for routing a vehicle distribution conduit at least partially within said channel, wherein the vehicle distribution system conduit is selected from the group consisting of electrical, hydraulic and ventilation, the panel having a first portion formed as an inner panel portion and a

second portion formed as an outer panel portion, and wherein said forming is by a method selected from the group consisting of quick plastic forming, superplastic forming and sheet hydroforming.

14. The method of claim 13, further comprising bending the panel at a fold line between the first portion and the second portion.

15. The method of claim 14, wherein the panel is characterized by a periphery, wherein a first segment of the periphery is that part of the periphery on a first side of the fold line and a second segment of the periphery is that part of the periphery on a second side of the fold line, and wherein said bending the panel includes bending the panel sufficiently such that at least a portion of the first segment substantially continuously abuts at least a portion of the second segment.

16. The method of claim 15, further comprising joining the first portion to the second portion along at least part of the first segment and the second segment.

17. The method of claim 16, wherein the first portion and the second portion at least partially enclose and further define the channel therebetween after said bending the panel, wherein at least one of the first portion and the second portion defines an opening for routing the vehicle distribution system conduit, and further comprising:

routing said vehicle distribution system conduit with respect to said opening such that said vehicle distribution system conduit is at least partially located within said channel.

18. The method of claim 17, wherein said routing is performed prior to said joining.

19. The method of claim 13, further comprising:

providing the panel.

20. A vehicle floor comprising:

a unitary, one-piece panel formed with an integral channel for routing a  
vehicle distribution system conduit at least partially within said channel, wherein the  
5 vehicle distribution system is selected from the group consisting of electrical, hydraulic  
and ventilation;

wherein the panel includes an inner panel portion and an outer panel  
portion, and wherein the panel is sufficiently bendable between the inner panel portion  
10 and the outer panel portion to at least partially enclose and further define said channel  
therebetween;

wherein the panel includes a front floor pan portion, a rear floor pan  
portion and a trunk portion;  
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wherein the panel is formed to at least partially define opposing rocker  
panel portions; and

wherein the panel is formed by quick plastic forming.